

ARACHNIDA

20. *Phalangium*.—Common in Ontario.

DIPTERA.

21. *Promachus apivorus*, Fitch.—Not taken in Ontario.

22. *Lydella doryphoræ*, Riley.—“ “

Of this array of insects, some 12 are tolerably common in Ontario; and these we will introduce, with all the honours, to our readers, contenting ourselves with a brief reference to the others.

Tetracha Virginica (No. 1), and *Passimachus elongatus* (No. 2), are two handsome ground beetles, and, in all probability, will not be found in Ontario.

Epicauta cinerea (No. 10), and *Epicauta vittata* (No. 11), will be treated of hereafter as enemies, although they appear to have the credit of attacking the larvæ of the Colorado Beetle. Until their reputation for good is somewhat better established, they should be looked upon with every suspicion.

Lebia grandis (No. 12), is an active beetle, with dark blue wing-covers, and yellowish brown head, thorax and legs.

Promachus apivorus (No. 21), is a large, savage, two-winged fly; it is commonly known as the Nebraska Bee-killer.

Lydella doryphoræ (No. 22), the Colorado Potato Beetle parasite, is also a two-winged fly. It closely resembles, in colour and size, the common house-fly, having, however, a brilliant silver white face, by which it may readily be distinguished. It deposits its eggs in the body of the living larva, and the grubs hatching therein finally destroy the larva. Mr. Riley, who appears first to have noticed this insect, states, that in 1868 it destroyed in his garden ten per cent. of the first brood, and fifty per cent. of the second brood, of the Colorado Beetle; so we will gladly welcome this friend to our shores, and trust that he will follow his enemy without waiting for the ceremony of an invitation from us.

We now come to those insect friends that we meet with in this Province. The five that we are now about to describe attack the Colorado Potato Beetle in the egg and larval state only. They belong to an order of beetles called *Coccinellidae*, and more popularly known as Lady-birds or Lady-cows. These titles are remnants of the olden times, when the Roman Catholic religion was the only Christian system, and these insects, being supposed to be under the special protection of the Virgin Mary, were honoured with her name, and called the Birds of our Lady, or Cows of our Lady, just as in France the children still give them the names of “*Bêtes de la Vierge*,” “*Bête à bon Dieu*,” or “*Vaches à Dieu*.” The perfect beetle, when touched, exudes from its abdomen a dark yellow mucilaginous liquid, of a pungent and disagreeable odour. This was formerly supposed, by the ignorant, to be a sure remedy for the toothache.

All the larvæ of the Lady-birds bear a strong family resemblance to each other, and figure 69 will give a tolerably good idea of their appearance. They are very active, and generally very numerous. When the larva has eaten all it can manage, and is arrived at maturity, it fastens itself to a leaf by the extremity of its tail, and then the skin splits off and leaves the pupa, from which, in about twelve days, the perfect beetle emerges. Their eggs, which are somewhat similar to those of the Colorado beetle, being, however, smaller in size, and laid in lesser groups, are often deposited quite convenient to those of the Colorado beetle, so that the young larva, when hatched, has seldom very far to search for food. We may mention here that our friends the Lady-birds are the most inveterate destroyers of aphids and almost all plant lice, so that their good services are nearly inestimable.



FIG. 69.
Colour—Black and orange.

THE SPOTTED LADY-BIRD (*Hippodamia maculata*, De Geer).—Fig. 70 is a small pinkish beetle marked with large black blotches. 1054-



THE NINE-MARKED LADY-BIRD (*Coccinella 9 notata*, Herbet).—Fig. 71 is somewhat rounder than the last, its colour is brick red, and it has nine black spots; this insect is one of our most common beetles, and may be found in every part of Canada.

THE THIRTEEN-DOTTED LADY-BIRD (*Hippodamia 13 punctata*, Linn).—

FIG. 71.

